



Mercury in the home

Mercury exists in several forms. Some forms are more dangerous than others, but all are toxic. Exposure to mercury – even in small amounts – may cause serious health problems.

While some manufacturers have reduced or eliminated the use of mercury in their products, there are still many products that we use every day in our homes that contain mercury. Some products are made with mercury added to perform a specific function. These products are called “mercury-added products.”

Other products may have small amounts of mercury in them because a chemical used in the manufacturing process is contaminated with mercury. These products are called “mercury-containing products.” Mercury-added products usually have much greater amounts of mercury in them than mercury-containing products.

The most commonly identified mercury-added products include some types of thermometers, barometers, thermostats, batteries and fluorescent bulbs. Other products that may contain mercury include detergents and cleaners, medical products, cosmetics, old pesticides and old paints.

The “Wisconsin Mercury SourceBook” is a compilation of

information to help identify and reduce the release of mercury in your community. It is available at www.epa.gov/glnpo/bnsdocs/hgsbook.

Use and handle these products carefully and responsibly. Recycle or properly dispose of these products when possible. In South Carolina, several communities have permanent hazardous household material collection programs or offer single-day collection events. Call your local recycling coordinator or public works director to see if your community has a permanent program or may be planning a collection event. If your community does not offer any type of program or collection, encourage them to set up one.

Look for mercury-free products and alternatives whenever possible.

Mercury-containing Products

The list below represents some of the major consumer products that contain mercury.

■ **BATTERIES** – Since 1994, federal law has limited the amount of mercury in button cell batteries (used in watches, hearing aids and calculators) and has prohibited intentional addition of mercury to standard

household batteries (dry-cell sizes A, AA, C, D, etc.).

■ **DETERGENTS AND DISINFECTANTS** – Some bleach, detergents with bleach, stain removers and soaps also contain mercury. To be more aware, read product labels and try to purchase mercury-free alternatives.

■ **FLUORESCENT BULBS** – Mercury is used in long fluorescent bulbs, compact fluorescent bulbs, high-intensity discharge (HID) bulbs and other types of energy-efficient lighting. Some fluorescent bulb manufacturers have introduced “green tip” bulbs. These bulbs typically contain less mercury than standard fluorescent bulbs, but still should be recycled or disposed of properly.

■ **JEWELRY** – There are some necklaces imported from Mexico that have a glass pendant that contains mercury. The pendants come in various shapes such as hearts, bottles, balls and chili peppers. Broken necklaces have resulted in mercury spills at schools.

■ **MEDICINE** – Mercury in the forms of phenylmercury acetate and ethylmercury has been used in fungicides, antiseptics or disinfectants. It

also has been used in a variety of products. Most of these uses have been discontinued, but small amounts of these compounds can still be found as preservatives in some medicines. The U.S. Food and Drug Administration maintains a list of medicines that contain mercury at www.fda.gov/cder/fdama/mercury300.htm. A type of mercury may still be found in some skin-lightening and freckle creams.

- **PAINT** – Mercury was used as a preservative, but its use in indoor and exterior paint was discontinued in 1991. Until recently, many water-based paints, including some interior paints, continued to use mercury as a fungicide. Visit www.epa.gov/iaq/homes/hip-painting.html for more information about indoor environmental concerns during remodeling.

- **THERMOMETERS (fever, candy, deep fry, oven, indoor and outdoor)** – Mercury is used in glass thermometers because it is sensitive to changes in temperature. Thermometers are one of the largest sources of mercury in municipal solid waste. The few drops of mercury found in a

common fever thermometer can contaminate a large number of fish. Consumers can purchase accurate alternatives such as digital or alcohol thermometers.

- **THERMOSTATS** – Thermostats contain more than five times the amount of mercury found in a typical fever thermometer. If you replace a thermostat, dispose of the old one through a hazardous household products collection program if possible or require the heating and air conditioning company to dispose of it properly. Mercury-free electronic or digital thermostats are available as replacements.

Other products that may contain mercury include:

- athletic shoes, toys and cards that light up;
- pilot lights in gas appliances such as stoves, water heaters, furnaces and dryers;
- older chemistry sets; and
- switches found in some fire alarms, septic tanks, car trunks and hoods, pinball machines and automatic shut-off irons.

Mercury also is in our cars and trucks.

Mercury also is found in hood and trunk light switches in vehicles. It can be released into the environment when vehicles are crushed, shredded or melted in steel furnaces. Although the amount of mercury in each switch is small (about a gram), the potential amount of mercury released into the environment is significant considering the number of cars retired each year. More than 8.4 million vehicles were retired in 2003 according to the Clean Car Campaign. This issue is not going away soon – these types of switches have been in use for more than 30 years.

Mercury emissions from steel furnaces, thought to result primarily from mercury switches, are more than 10 percent of the total mercury emissions nationally according to the U.S. Environmental Protection Agency.

Some states are addressing this issue by requiring the removal of these switches before the vehicles are retired. Many automobile manufacturers are reducing or eliminating mercury switches from new models of vehicles.

For more information, visit www.scdhec.gov/mercury or call the S.C. Department of Health and Environmental Control's Office of Environmental Community Health at 1-888-849-7241. Information for this fact sheet was provided courtesy of the U.S. Environmental Protection Agency, the Agency for Toxic Substances and Disease Registry, the Maine Department of Environmental Protection; the Wisconsin Department of Natural Resources; and the U.S. Food and Drug Administration.